

PATENT
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CENTRAL FAX CENTER

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IN THE CLAIMS

1. - 20. (Cancelled)

21. (New) A method for dynamic grouping of clients to support scalable group communications in interactive applications, comprising:

identifying an application having an application space;

identifying a plurality of clients of said application such that each client has a communication interest with said application;

identifying a communication network that handles communications between said plurality of clients and said application and that includes network resources with network characteristics;

mapping said network resources based on said network characteristics to produce network map information;

partitioning said application space into a plurality of communication interest partitions, each partition of which represents a communication interest of at least one client of said plurality of clients;

indexing the partitions and said network map information to form a multi-type attribute index structure;

grouping said plurality of clients based on their communication interest and on said multi-type attribute index structure; and

forming a hierarchical structure that includes a parent node and at least one control node for communicating data to said plurality of clients such that said hierarchical structure is based on said attribute index structure and on the client groupings, wherein said parent node establishes a communication overlay that directs communications between said plurality of clients and said application, and said parent node produces a membership list of clients having an interest in at least one communication interest partition, wherein said membership list of clients maps into communication groups to enable distributed communication between said plurality of clients and said application.